

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Cheng Li, et al.

Application No.: 10/567,006

Confirmation No.: 9880

Filed: January 31, 2006

Art Unit: 3748

For: IMPROVED DIESEL EXHAUST FILTER

Examiner: Tu Minh Nguyen

**REPLY BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

As required under § 41.41(a)(1), this Reply Brief is filed within two months of the Examiner's Answer filed on November 29, 2010. The Reply Brief contains items under the following headings under separate page(s) as suggested by M.P.E.P. § 1208(I):

(A) STATUS OF CLAIMS: appears on page 2;

(B) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL: appears on page 3;  
and

(C) ARGUMENT: appears on pages 4 and 5.

## **STATUS OF CLAIMS**

Claims 1-9 and 11-19 are pending. Claims 1-5, 8, 9, 12, 18, and 19 have been rejected. Claim 10 has been cancelled. Claims 6, 7, 11 and 13-17 have been withdrawn. The rejections of Claims 1-5, 8, 9, 12, 18, and 19 are being appealed.

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

(1) Whether any one of the Claims 1-5, 8, 9, 12, 18, and 19 are obvious under 35 U.S.C. §103(b).

## **ARGUMENTS**

The following arguments are in response to the arguments presented in the Examiner's Answer under (9) Grounds of Rejection and specifically the subheadings (Issues 1-3).

### Issue (1)

The Examiner points out that Claim 6 was withdrawn and the arguments are moot. Applicants observe that the reference to Claim 6 was an inadvertent error and should have referred to Claim 3. This is readily apparent from page 7 of the Appeal Brief, under subheading "Dependent Claim 6," 1<sup>st</sup> paragraph, where the language of Claim 3 clearly is recited. Thus, Applicants respectfully request that the arguments presented for "Claim 6" be reconsidered for "Claim 3".

### Issues (2 and 3)

In the first paragraph of page 4 of the Examiner's answer, the Examiner has maintained that Molinier describes a filter having three catalyst layers. Applicants have previously refuted this in their Appeal Brief. The Examiner has gone on to further explain the basis of his argument in "Issue 3" based upon Molinier (lines 29-36 of col. 8). The Examiner's argument is that since Molinier may impregnate catalyst at differing times then the catalysts will make distinct layers within the wall. From Figure 7, and the plain language of Claims 1 and 8, the layers of the present invention clearly are distinct layers through the thickness of the wall.

In contrast, as presented by the Examiner, Molinier, at col. 8, lines 29-36, merely describes that the catalyst may be impregnated one after the other into the porous wall of the substrate (honeycomb wall). The Examiner has failed to provide any reasonable argument or evidence of how, by merely impregnating from one solution impregnated one after the other, distinct layers within the wall thickness are formed as shown by Figure 7 of the specification and as claimed in Claims 1 and 8. In other words, what Molinier teaching causes a catalyst solution to suddenly stop part way through the thickness of the porous wall? This conclusion is mere conjecture with no scientific basis or evidence presented to support it. Capillary action would, in fact, suggest that such catalyst solutions would be impregnated in the same manner absent some

other teaching. Consequently, the conclusion of the Examiner is clear error and Claims 1 and 8 and their dependent Claims are non-obvious.

Thus, to summarize, Claim 8 is non-obvious because the Examiner has not shown where Molinier forms three layers within the wall thickness. Likewise, Claim 1 is non-obvious, because the Examiner has failed to show how Molinier teaches two distinct layers entirely within the wall thickness.

For the aforementioned reasons, Applicants believe the Examiner's rejection contains clear error. Accordingly, Applicants submit the present application contains allowable subject matter and is in condition of allowance and respectfully request the board to rule so.

Dated: January 28, 2011

Respectfully submitted,

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